

## **DISCLAIMER**

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This document is intended to be a general guidance/reference document and should be viewed as such. For more specific and/or detailed information, please go to the specific law or regulation referenced herein.

## **SECTION I**

### **INTRODUCTION**

The Emergency Response Section (ERS) of the South Carolina Department of Health and Environmental Control, on the average, receives over 400<sup>1</sup> Spill Report Forms from the District EQC offices each year. The total number of release incidents reported to the ERS in FY94 was 571. Some small incidents did not warrant a field investigation.

Many of the reported incidents require an investigation by DHEC. The investigations, in part, are to determine what extent the general public may be effected, impact to the environment, who is responsible for the spill and the subsequent cleanup, and if the material was properly cleaned up such that any further threat to the public's health and the environment is alleviated.

The Pollution Control Act (PCA)<sup>2</sup> gives DHEC the responsibility of preparing and developing a comprehensive program for the abatement, control, and prevention of air, soil, and water pollution. The PCA also empowers DHEC to inspect and investigate conditions relating to the pollution or the possible pollution of the environment of the State.

The Oil and Gas Act (OGA)<sup>3</sup> requires all state agencies that participate in the containment, collection, dispersal, or removal of an oil discharge or in restoration necessitated by such discharge to keep certain records. Such records will contain all expenses incurred as well as all services performed by each agency. A copy of all such records are required to be sent to DHEC at the completion of each incident.

This manual will outline the responsibilities of the DHEC personnel involved in such incidents as well as offer guidance in investigations, cleanups, disposals, follow-up reports, equipment use, and other emergency response issues.

The South Carolina Contingency Plan for Spills and Releases of Oil and Hazardous Materials discusses, in detail, each state agency's responsibility and capability during spills and releases. The Contingency Plan should be referenced when extra manpower and equipment may be required during an incident. Unless otherwise noted herein, the State On-Scene Coordinator (SOSC) must be the one to request such equipment and personnel from the agencies from whom the assistance is required.

The Department's response to oil and hazardous materials spills and releases is mandated and guided by the S.C. Pollution Control Act, the S.C. Oil and Gas Act, the S.C. Hazardous Waste Management Act, the S.C. Air Pollution Control Regulations, the S.C. Safe Drinking Water Act, the S.C. Solid

Waste Management Act, and the S.C. State Underground Petroleum Environmental Response Bank Act. Under the Federal Clean Water Act, the Department serves as a member of the Federal Regional Response Team and coordinates the implementation of the USEPA and SCDHEC Contingency Plans. In the coastal area, the Department ensures that state interests and concerns are addressed and cooperates with the U.S. Coast Guard, who is designated federal on-scene coordinator, in implementing contingency plans. Our response authorities are primarily as follows:

- A. §48-1-90 of the Pollution Control Act, Chapter 1 of Title 48 Environmental Protection and Conservation, Code of Laws of South Carolina, 1976, states that "...It shall be unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department..."
- B. §48-43-520 (4), of the 1977 South Carolina Oil and Gas Act confers upon the Department power to: "... (a) Deal with the hazards and threats of danger and damage posed by such transfers (of pollutants [defined as oil of any kind and in any form -e.g. gasoline, pesticides, ammonia, chlorine, and derivatives thereof ] between vessels, between onshore facilities and vessels, and between terminal facilities within the jurisdiction of the State and State waters) and related activities" and (b) Require the prompt containment and removal of pollution occasioned thereby...". §48-43-530(1) continues: "The Department may call upon any other state agency for consultative services and technical advice and the other agencies are directed to cooperate with the Department". §48-43-550 directs "The Department shall from time to time adopt, amend, repeal, and enforce reasonable regulations relating to the cleanup and removal of discharges of pollutants into the waters or onto the coasts of this State. Such regulations shall include, but not be limited to: (a) Operation and inspection requirements for terminal facilities, vessels, and other matters relating to certification under this article but shall not require vessels to maintain spill prevention gear, holding tanks of any kind, and containment gear in excess of federal requirements. (b) Procedures and methods of reporting discharges and other occurrences prohibited by this article. (c) Procedures, methods, means, and equipment to be used by persons subject to regulation by this article on the removal of pollutants. (d) Development and implementation of criteria and plans to meet pollution occurrences of various degrees and kinds. (e) Creation by contract or administrative action of a state response team which shall be responsible for creating and maintaining a contingency plan of response, organization, and equipment for handling emergency cleanup operations. The state plans shall include detailed emergency operating procedures for the State as a whole and the team shall from time to time conduct practice alerts. These plans shall be filed with the Governor and all Coast Guard stations in the State and Coast Guard Captains of the port having responsibility for enforcement of federal pollution laws within the State, on or before January 1, 1978. The contingency plan shall include all necessary information for the total containment and cleanup of pollution, including but not limited to an inventory of equipment and its location, a table of organization with the names, addresses and telephone numbers of all persons responsible for implementing every phase of the plan, a list of available sources of supplies necessary for cleanup, and a designation of priority zones to determine the sequence

and methods of cleanup. The state response team shall act independently of agencies of the federal government but is directed to cooperate with any federal cleanup operation." §48-42-560 states "(1) Any person discharging pollutants in violation of this article shall immediately undertake to contain, remove, and abate the discharge to the Department's satisfaction. Notwithstanding the above requirements, the Department may undertake the removal of the discharge and may contract and retain agents who shall operate under the direction of the Department. (2) If the person causing a discharge, or the person in charge of facilities at which a discharge has taken place, fails to act, the Department may arrange for the removal of the pollutant, except that if the pollutant was discharged into or upon the navigable waters of the United States, the Department shall act in accordance with the national contingency plan for removal of such pollution as established pursuant to the Federal Clean Water Act, as amended, and the costs or removal incurred by the Department shall be Paid in accordance with the applicable provisions of the law. Federal funds provided under this act shall be used to the maximum extent possible prior to the expenditure of state funds. (3) In the event of discharge the source of which is unknown, any local discharge cleanup organization shall, upon the request of the Department or its designee, immediately contain and remove the discharge."

The Federal Water Pollution Control Act as amended, has provisions relating to the national contingency plan for the reporting of, responding to, and removing of pollutants. Spills of oil or reportable quantities of hazardous materials to navigable waters or releases of reportable quantities under the Comprehensive Environmental Response Cleanup and Liability Act (CERCLA) are required to be reported immediately to the National Response Center (1-800-424-8802).

- C. The South Carolina Hazardous Waste Management Regulations 61-79.265 Subpart D requires that all fully regulated generators or treaters, storers, or disposers of hazardous wastes have a contingency plan and emergency procedures which must be implemented upon release of a hazardous waste. In addition, spilled hazardous materials may become hazardous wastes, and must be managed and disposed in accordance with these regulations. Authority is given to the Department emergency responder to waive certain requirements as appropriate in an emergency situation. Communication with the Emergency Response Section Manager and the district hazardous waste consultant will guide you in this area.
- D. The South Carolina Air Pollution Control Regulations.

R.61-62.4 HAZARDOUS AIR POLLUTION CONDITIONS. "B. General. The owner or operator of any source, in addition to complying with all applicable regulations and standards, shall take all steps necessary to protect human health and welfare and otherwise minimize the effects of unintended, short-term or other releases of air contaminants and other substances which produce unintended hazardous conditions.", and "D. Emergency Actions. In the event that releases of dust, fumes, smoke, gases, mists, vapors or other substances occur in such quantity as to create imminently hazardous levels, the owner or operator of the source shall

take all necessary emergency acts to cause the release to cease, to notify nearby residents and occupants, to assist in evacuation if deemed necessary, to notify the Department immediately and to take such other action as responsible officials deem advisable."

R.62.2 PROHIBITION OF OPEN BURNING. "Open burning is prohibited except...". *There are eleven exceptions to this regulation. These exceptions are listed in the actual regulation.*

- E. The South Carolina State Underground Petroleum Environmental Response Bank Act. This Act requires release reporting, assessment and remediation. For further information on this act, refer to Underground Storage Tanks later in this section.
- F. The S.C. Hazardous Waste Management Act has incorporated Federal CERCLA under Section 44-56-200. When read broadly, the Department has authority to enforce the Reportable Quantity provisions along with Response Authority provisions under the Federal statute. Under CERCLA, as amended, Section 104 identifies Response Authorities which are stated as follows:

"Whenever:

- (A) any hazardous substance is released or there is a substantial threat of such a release into the environment, or
- (B) there is a release or substantial threat of release into the environment of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare, the President is authorized to act, consistent with the national contingency plan, to remove or arrange for the removal of, and provide for remedial action relating to such hazardous substance, pollutant, contaminant at any time (including its removal from any contaminated natural resource), or take any other response measure consistent with the national contingency plan which the President deems necessary to protect the public health or welfare or the environment. When the President determines that such action will be done properly and promptly by the owner or operator of the facility or vessel or by any other responsible party, the President may allow such person to carry out the action, ..."

In taking a response action DHEC must be consistent with the National Contingency Plan.

#### South Carolina Contingency Plan

The S.C. Contingency Plan is a resource manual for the SOSC to utilize during release events. The Plan contains information on all allied State agencies that may be called upon by the SOSC to lend assistance during such events. The Plan contains specific information on the Department of Natural Resources (SCDNR), Department of Transportation, Highway Patrol, Transportation Police, Division

of State Fire Marshal, Forestry Commission, County Emergency Preparedness Offices, and DHEC.

The Plan lists personnel and equipment from each of the above agencies that the SOSOC has access to during release events. All DHEC emergency response personnel, both District as well as Central Office, should be familiar with the Plan. This Procedures Manual will aid in carrying out responsibilities of the Plan.

## REPORTABLE QUANTITIES

### Summary of Federal and State Requirements for Notification of Releases and Imminent Conditions

Our agency handles a variety of unplanned spills, leaks, discharges, emissions or dumpings of hazardous materials which occur under a range of circumstances. Many such events potentially impact public health and the environment. This subsection highlights the assortment of federal and state regulations and laws governing circumstances under which releases or imminent conditions (non-nuclear) must be brought to the attention of public officials.

A responsible party's release event may fall under a reporting time frame allowing for business hours notification. However, as is most often the case, circumstances require that they immediately report their incident to the department. Compliance in these situations better ensures that public safety will be served and that response resources are utilized to maximum effect.

Department officials respond to fixed facility or transportation incidents at any hour and, ideally, are adequately briefed by the RP prior to arriving on-site. While marshaling resources and determining compliance, the responder will want to know the type of chemical, the affected medium, the incident duration, the cause, and what other information is required of the RP. Following is a list of the summarized notification requirements for release incidents and scenarios.

- I. Petroleum Product Spills
  - Federal Notification
  - State Notification
- II. CERCLA And EPCRA
  - CERCLA Hazardous Substances
  - HWMA Reference to State Enforcement of CERCLA
  - EPCRA
  - Incident Reporting to State and Local agencies
- III. Reporting Incidents Under State Regulations
  - Air Emissions
  - Equipment Failure-Induced Air Releases
  - NPDES Noncompliance Reporting
  - NPDES Storm water Discharges
  - Underground Storage Tanks

Infectious Waste  
Solid Waste  
Hazardous Waste

## **I. Petroleum Product Spills**

### **Federal Notification**

Under 40 CFR §110.6 & §110.10, immediate notification must be made to the National Response Center/Coast Guard when petroleum product spills violate applicable water quality standards or cause a sheen or emulsion in navigable waters or adjoining shoreline.

### **State Notification**

State-wide, petroleum product spills account for the majority of releases and the Department's response time. Due to the limitations of enforcing the "intent" of the Pollution Control Act of 1970, the Department can only request that RP's will promptly notify when their release falls under the general definition of an "unpermitted discharge" (section 90 of the PCA).

In lieu of a specific notification requirement, it should be emphasized to those seeking guidance that the RP choose to involve DHEC on the "front end". Prompt notification and satisfactory clean up minimizes the consequence of an enforcement action applied to what would otherwise be a "discovered" unpermitted discharge.

Timely notification of nearly all petroleum spills could be considered courtesy notifications unless significant amounts of additives in the product would constitute an RQ under CERCLA.

## **II. CERCLA AND EPCRA**

### **CERCLA Hazardous Substances**

The Clean Water Act, RCRA, the Clean Air Act, and EPCRA comprise the statutory sources for the CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR §302.4). The over 700 substances listed covers releases of raw materials, intermediate byproducts, and all hazardous wastes. A reportable quantity (RQ) is assigned to a substance based on two adjustment criteria:

First, intrinsic properties are evaluated: aquatic toxicity, mammalian toxicity, ignitability, reactivity, chronic toxicity, and potential carcinogenicity.

Second, the action of biodegradation, hydrolysis, and photolysis on the breakdown of the substance in the environment is evaluated for production of a less hazardous or more hazardous compound.

A final RQ may range from 1 to 5000 pounds depending on how the above criteria rate a chemical's potential for harm to public health or the environment.

It should be noted that listed hazardous wastes are hazardous substances with assigned RQ's under CERCLA. They are listed at the end of 40 CFR table 302.4 and in the List of Lists.

P, U, F, and K listed wastes are featured along with characteristic D wastes.

Newly added substances are assigned a statutory RQ of 1 pound until the EPA adjusts the final RQ by regulation. For example, Section 112 of the Clean Air Act Amendments of 1990 added 45 new chemicals to the CERCLA list including glycol ethers, hexane, biphenyl and caprolactam. Pending their regulatory adjustment, facilities will continue to report one pound releases of these chemicals.

Whatever the status, all RQ's that are released to the environment within a 24-hour period must be immediately reported to the National Response Center under CERCLA.

### **HWMA Reference to DHEC Enforcement of CERCLA**

In 1992 the South Carolina General Assembly amended section 44-56-200 of the 1976 Hazardous Waste Management Act. In the first half of the one-paragraph section, it makes a general statement empowering the department to "implement and enforce" CERCLA and subsequent amendments. It then goes on to specifically empower the department to pursue response cost recovery as described in the provisions of section 107 of CERCLA.

The general referral to enforcing the entirety of CERCLA introduces the opportunity to pursue compliance of section 103 of the Act; "Notices, Penalties". Section 103 sets the guidelines for notification to the NRC of RQ releases. It is now left to the department to enforce the intent of section 103 and, as advised by the legal department, levy civil penalties if necessary.

CERCLA Hazardous Substance RQ releases should be evaluated for the RP's adequate and timely notification. Additional criteria such as the magnitude of the release, threat to public safety or potential for environmental impact affect the decision to pursue enforcement. The technicality of whether the department or the NRC was notified for a given incident is not as crucial as determining that the method when employed notified the local or state responders immediately. Issuance of warning letters will follow the initial episodes of non-compliance by the RP. The Emergency Response Section should be contacted if a warning letter should be considered for a specific release.

### **EPCRA**

The Emergency Planning Community Right-to-know Act is a federal law designed, in part, to involve states and their local organizations with the release notification requirements formerly received directly only by the NRC under CERCLA. The law calls for the establishment of a State Emergency Response Commission which then sets up Local Emergency Planning Committees. EPCRA introduces a list of Extremely Hazardous Substances to the CERCLA Hazardous Substance List. These are found compiled most recently in the June 1994 EPA Title III List of Lists.

#### **Reporting Summary**

In the case of an RQ release, RP's must verbally notify the State Emergency Response Commission via the 24-hour emergency response line and submit follow-up written reports to the Emergency

Response Section in Columbia. These regulated releases may be called into department district offices but that does not constitute a notification of the SERC. Such an omission is subject to penalties.

Exceptions to release notification include federally permitted releases and releases that are completely contained and effecting only facility personnel.

Of concern are reportable quantities released within a 24 hour period. 40 CFR 355.4 (b) requires a facility operator to immediately provide a verbal report on the following information:

- chemical identification
- if it is an EHS
- estimate of quantity released
- time and release duration
- medium or media affected
- associated health risk and medical advise for those exposed
- the need for precautions such as evacuation
- facility contacts

County E.P.D., DHEC, and the NRC receive verbal notification. A written follow up, elaborating on the above criteria, must be submitted as soon as practicable to the County E.P.D. and DHEC after the incident.

### **III. Notifications Under State Regulations** **Air Emissions**

Under R.61-62.4 any releases of dust, fumes smoke, gases, vapors etc., that create hazardous conditions posing risk of injury to humans and property, as well as animals or plant life must be reported to the Department immediately.

#### **Equipment Failure-Induced Air Release**

A standard (air) permit condition for sources not required to have continuous emission monitors mandates notification to DHEC when air contaminants are discharged due to failure of pollution control equipment.

Verbal notification must be made within 24 hours of the beginning of equipment failure. A written report will be submitted within 30 days. It includes eight information requirements describing the occurrence and follow up actions.

#### **NPDES Non-Compliance Reporting** (Industrial and Domestic WWTP)

A standard NPDES permit condition for discharge of a pollutant above the authorized level requires the notification of DHEC when the discharge may endanger public health or the environment. Verbal



notification must be made within 24 hours of becoming aware of the condition.

Other violations warranting a 24-hour notification includes an unanticipated bypass exceeding effluent limitations and any upset exceeding effluent limitations. A written followup will be submitted within five days. It includes information describing the discharge, its cause, corrective action taken, and action taken to prevent future occurrences.

### **NPDES General Permit For Storm Water Discharges (Industrial Activity)**

Permittees with storm water discharges that meet the notice requirements under 40 CFR 117 or 40 CFR 302 must provide immediate verbal notification to the department Emergency Response Section at (803) 253-6488 and the NRC. The permittee shall submit to the Emergency Response Section and EPA Region IV, within 14 calendar days, a detailed account of the release and steps taken to prevent reoccurrence of such releases.

### **Underground Storage Tanks**

State regulation R.61-92, Part 280, Subpart E requires owners and operators of UST systems to notify DHEC (at 734-5331) for any of the following conditions:

- the discovery of released regulated substances at the UST site or in the surrounding area
- unusual operating conditions observed by owners and operators
- monitoring results from a release detection method that indicate a release may have occurred
- spill or overfill of a petroleum product that causes a sheen on nearby surface water or exceeds 25 gallons or other reasonable amount previously specified by the Department
- spill or overfill of a petroleum product under 25 gallons if cleanup cannot be accomplished within 72 hours
- spill or overfill of an RQ of a CERCLA Hazardous Substance
- spill or overfill of less than an RQ that cannot be cleaned up within 72 hours

-Notification must be made within 72 hours-

### **Infectious Waste**

State regulation R.61-105, N (9) requires transporters of infectious waste to immediately "telephone" DHEC (803-253-6488) in the event of a discharge during transportation or storage. All requested information must be given.

### **Hazardous Waste**

Generator:

Under R.61-79.262.34(d)(iv)(C) of the HWMR, the RP must notify the Department of a release due to one of two criteria; (1) the generator has judged that the facility release "could

threaten human health outside the facility" or, (2) "the generator has knowledge that a spill has reached surface water". The verbal report must include the following information:

- name, address and generator EPA ID #
- date, time and type of incident
- quantity and type of waste involved
- extent of injuries
- estimated quantity and disposition of recovered materials

Transporter:

Under R.61-79.263.30(c)(3) of the HWMR, an "air, rail, highway, or water transporter who has discharged hazardous waste must...Immediately telephone the Department's 24-hour emergency telephone number...giving all requested information".

Treatment Storage and Disposal Facilities:

Due to an emergency situation the TSDF would notify the State or local agencies under R.61-79.264.56(a)(2), (d)(2) (i), and (j) respectively.

A state agency with designated response roles is notified "if their help is needed".

After considering both direct and indirect effects of the release and positively determining it could threaten human health, or the environment outside the facility, the TSDF must notify the Department with the following information:

- caller's name and phone #
- TSDF's name and address
- time and type of incident
- name and quantity of the materials involved
- extent of injuries
- possible hazards to human health or the environment outside the facility

Prior to the resumption of operations in the affected area, The Department must be notified that: (1) no released incompatible material is stored, treated or disposed of before cleanup procedures are complete, and (2) all listed emergency equipment has been cleaned and/or is fit for use.

Within 15 days of the incident the TSDF must submit to the Department a written report including:

- owner's name, address and phone #

- facility's name, address, and phone #
- date, time and type of incident
- name and quantity of materials involved
- extent of injuries
- an applicable assessment of actual or potential hazards to human health or the environment
- quantity and disposition of recovered material

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<sup>1</sup> Yearly average of all spills reported to the DHEC Emergency Response Section and logged into the spills database between 1988 & 1993.

<sup>2</sup>§48-1-50(9) Code of Laws of South Carolina, 1976, as amended.

<sup>3</sup>§48-43-570 (c), Code of Laws of South Carolina, 1976, as amended.